

REMARKS

The Office Action dated December 21, 2006 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 29-34, 37, 38, 43-45, 55 and 58 are amended to more particularly point out and distinctly claim the subject matter of the present invention. New claim 60 is added. No new matter is added. Claims 29-38, 43-45 and 54-60 are respectfully submitted for consideration.

The Office Action rejected claims 29, 54 and 59 on the grounds of nonstatutory obviousness-type double patenting as being obvious over claims 1 and 20 of US Patent No. 7,024,688 ('688). The Office Action took the position that although the conflicting claims are not identical, that they are not patentably distinct from each other. Applicants respectfully traverse this rejection for the reasons set forth below.

The Office Action asserted that claims 29, 54 and 59 recites a network control element that determines whether to perform authentication verification before forwarding the SIP message to the subscriber equipment.

In particular, the features of claims 29, 54 and 59 that the network control element determines whether it has to perform the authentication or not, is not obvious to one skilled in the art over claims 1 and 20 of '688. Namely, the fact alone that according to claims 1 and 20 of '688, the user agent response includes information that the authentication will be performed using a UMTS AKA mechanism does not indicate that

the corresponding network element performs the determination. These features are neither disclosed nor suggested in claims 1 and 20 of '688.

In the "Response to Arguments" section, the Office Action asserted that the present application broadly recites that "wherein the network control element is further adapted to determine whether it has to perform a verification of the authentication, and in case the network control element does not have to perform the verification, to forward a scheduled result to a second network control element by including the scheduled result into the session invitation message." The Office Action goes on to state that this limitation is reasonably interpreted to be that the network control element is examining the incoming packet to see if it is required to perform the authentication process or to forward or redirect to other network control element which is what is involved in proxying and redirecting a packet encompasses. However, Applicants submit that the Office Action appears to disregard the features clearly recited in claims 29, 54 and 59 of the present application which are non-obvious over claims 1 and 20 of '688. Claims 29, 54 and 59 of the present invention recite in part: if the network control element does not have to perform the verification, forward a scheduled result to a second network control element by including the scheduled result into the session invitation message; if the network control element has to perform the verification, the control element is configured to receive the scheduled result from another network control element, wherein the scheduled result is included in the session invitation message, extract the scheduled result from the session invitation message and to forward the session invitation message

without the scheduled result to the subscriber equipment, and verify an authentication result with a scheduled result, which are recited in claims 29, 54 and 59. Applicants submit that at least these additional features render the present application patentably distinct and non-obvious over claims 1 and 20 of '688. Claims 1 and 20 of '688, do not address the additional steps recited in claims 29, 54 and 59. Thus, claims 29, 54 and 59 are not obvious over claims 1 and 20 '688 as asserted in the Office Action.

Further, because claims 30-38, 43-45 and 55-58 depend from claims 29 and 54, these claims are non-obvious over '668 at least for the same reasons discussed above. Accordingly, withdrawal of the rejection of claims 29-38, 43-45 and 55-58 on the grounds of non-statutory double patenting over claims 1 and 20 of '688 is respectfully requested.

The Office Action rejected claims 29-38, 43-45 and 54-59 under 35 U.S.C. 103(a) as being obvious over the publication "Network Working Group" to Handley et al., in view of US Patent No. 6,425,004 to Hardjono (Hardjono). The Office Action took the position that Handley disclosed all of the features of these claims except the network control element has to perform the verification, to receive the scheduled result from another network control element, wherein the scheduled result is included in a session invitation message without the scheduled result to the subscriber equipment, and to verify the authentication result with a scheduled result. The Office Action asserted that Hardjono disclosed these features. Applicants respectfully submit that the cited

references taken individually or in combination, fail to disclose or suggest all of the features recited in any of the pending claims.

Claim 29, from which claims 30-38 and 43-45 depend is directed to a network control element, wherein, during a subscriber equipment terminated call, the network control element is configured to send a session invitation message to the subscriber equipment, the session invitation message including authentication information. The network control element is further configured to determine whether it has to perform a verification of the authentication. If the network control element does not have to perform the verification, forward a scheduled result to a second network control element by including the scheduled result into the session invitation message. If the network control element has to perform the verification, the control element is configured to receive the scheduled result from another network control element, wherein the scheduled result is included in the session invitation message, extract the scheduled result from the session invitation message and to forward the session invitation message without the scheduled result to the subscriber equipment, and verify an authentication result with a scheduled result.

Claim 54, from which claims 55-58 depend, is directed to a method of performing authentication of a subscriber during a subscriber equipment terminated call. A session invitation message is sent from a network control element to the subscriber equipment, the session invitation message including authentication information. The network control element determines whether the network control element has to perform a verification of

the authentication or not. In case the network control element does not have to perform the verification, forwarding a scheduled result to a second network control element by including the scheduled result into the session invitation message. In case the network control element has to perform the verification, the scheduled result is received from another network control element, wherein the scheduled result is included in the session invitation message. The scheduled result is extracted from the session invitation message and forwarding the session invitation message without the scheduled result to the subscriber equipment. An authentication result is verified with a scheduled result.

Claim 59 is directed to a computer program embodied on a computer-readable medium to perform authentication of a subscriber during a subscriber equipment terminated call. A session invitation message is sent from a network control element to the subscriber equipment, the session invitation message including authentication information. The network control element determines whether the network control element has to perform a verification of the authentication or not. In case the network control element does not have to perform the verification, a scheduled result is forwarded to a second network control element by including the scheduled result into the session invitation message. In case the network control element has to perform the verification, the scheduled result is received from another network control element, wherein the scheduled result is included in the session invitation message. The scheduled result is extracted from the session invitation message and forwarding the session invitation

message without the scheduled result to the subscriber equipment, and an authentication result is verified with a scheduled result.

Applicants respectfully submit that each of the above claims recites features that are neither disclosed nor suggested in any of the cited references.

Hadley is directed to a Signal Initiation Protocol (SIP). The SIP is an application layer control (signaling) protocol for creating, modifying and terminating sessions with one or more participants. These sessions include Internet multimedia conferences, internet telephone calls and multimedia distribution. Members in a session can communicate via multicast or via a mesh of unicast relations, or a combination of these.

Hardjono is directed to detecting and locating a misbehaving router in a network domain. In particular, it seems that a kind of test authentication is performed with a certain device in a network, and if this authentication fails, i.e., gives the wrong results, the corresponding device is forwards the packet to a secure and trusted authority in the receiving sector. The secure and trusted authority in the receiving sector forwards the packet to other secure and trusted authorities. The secure and trusted authorities are able to determine whether any device in its sector is the originating device for the packet by computing device verification tags for each device in the sector and comparing the device verification tags to the device tag in the packet.

Applicants submit that the cited references fail to disclose or suggest at least the feature of in case the network control element does not have to perform the verification, to forward a scheduled result to a second network control element by including the

scheduled result into the session invitation message, as recited in claim 29 and similarly recited in claims 54 and 59. The Office Action relied on Hardjono to disclose this feature. However, Hardjono merely discloses that a receiving router receives an authentication result from another router. In case the result, i.e., the routing information, is invalid, the receiving router forwards the packet to an STA which is a secure and trusted authority (STA) (See Fig. 8 and column 5, line 60 to column 6, line 18, column 4, lines 18 to 20 of Hardjono). Further, Hardjono neither discloses nor suggests that the received data packet contains a session invitation message.

In the “Response to Arguments” section, the Office Action appeared to admit that Hardjono does not teach or suggest that the data packet contains a session invitation message. However, in its rationale for maintaining the rejection, the Office Action asserted that the claimed invention can be reasonably interpreted to be merely a network device examining an incoming packet to determine whether the packet is required to be authenticated. The Office Action appears to disregard the feature of a session invitation message. As such, the Office Action takes the position that the “test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference, nor is it that the claimed invention must be expressly suggested in any one or all of the references.”

However, Applicants submit that it is well established in US Patent law, that in order to establish prima facie obviousness, the prior art references must teach or suggest all the claim limitations. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Thus, the Office Action can not disregard the feature of a session invitation message that is clearly recited in the claims.

Applicants respectfully submit that because claims 30-38, 43-45 and 55-58 depend from claims 29 and 54, these claims are allowable at least for the same reasons as claim 29 and 54, as well as, for the additional features cited in these dependent claims.

Based at least on the above, Applicants respectfully submit that the cited references fail to disclose or suggest all of the features recited in claims 29-38, 43-45 and 54-59. Accordingly, withdrawal of the rejection of claims 29-38, 43-45 and 54-59 under 35 U.S.C. 103(a) is respectfully requested.


As stated above new claim 60 is added. Applicants respectfully submit that claim 60 recites features that are neither disclosed nor suggested in any of the cited references.

Applicants respectfully submit that each of claims 29-38, 43-45 and 54-60 recite features that are neither disclosed nor suggested in any of the cited references. Accordingly, it is respectfully requested that each of claims 29-38, 43-45 and 54-60 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



David E. Brown
Registration No. 51,091

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

DEB:jf